

Introduction to economic models of disclosure and cost of capital

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Overview

This course is designed to introduce students to some of the analytical models used in accounting and finance research to investigate disclosure and cost of capital. There are two broad objectives:

1. To become familiar with and gain an understanding of analytical models relating to disclosure;
2. To explore how those models can be used to develop our intuition regarding the link between disclosure and cost of capital.

The approach taken is to employ simple models similar to, but generally less complicated than, some of the models that appear in the analytic disclosure literature. To that end, there are few pre-requisites for the course. Students should be comfortable with some basic algebra, calculus, and mathematical statistics (*e.g.*, be familiar with normal distributions). But there are no advanced mathematical requirements.

Course structure and materials

This is an online course. It is divided into a number of separate units which each cover different topics relating to the overall question of disclosure and cost of capital.

There is no textbook for the course. However, background notes will be provided relating to each unit. These notes develop the relevant model used to address the topic of the unit. The notes also contain a small number of practice problems for students to use in developing their understanding of the material. Since this is an online course, there will also be videos available where I discuss the models and concepts relating to each unit.

The course does not discuss specific papers from the literature. Instead, simplified models are developed in the background notes. These models get at most of the same issues that are found in the research literature, but in a (hopefully) more accessible manner. This is appropriate for the course's objectives. However, for students wanting to develop a deeper understanding of research in the area, a reading list of some relevant research papers relating to each topic will be provided as a starting point for further study.

Given its limited length, only a limited number of topics are covered in the course. However, they should provide a good foundation for students wanting to investigate additional related topics.

Assessment

There will be a single assignment. This can be done individually or in groups, though group work is recommended. There is a great deal of additional understanding that can come from exchanging thoughts and ideas in a group.

List of units and topics

Unit 1: The basic model

This unit introduces a basic model structure that is used throughout most of the course. The unit also discusses how disclosure quality and cost of capital might be captured in the model.

Unit 2: Pre- versus post-disclosure cost of capital

This unit looks at cost of capital measured prior to versus after disclosure, and what difference this might make.

Unit 3: Disclosure and private information

This unit considers how introducing private information into the model affects the analysis. This allows a consideration of information asymmetry and its link to cost of capital. It also provides an introduction to a “rational expectations” model similar to those found in the research literature.

Unit 4: Endogenous disclosure quality

This unit extends the basic model to allow (public) disclosure quality to be endogenous, rather than exogenous as in the first three units.

Unit 5: Real effects of disclosure

This unit introduces a production decision for the firm in the basic model. This allows a consideration of “real effects” of disclosure and how this might affect the link between disclosure and cost of capital.

Unit 6: Imperfect capital markets

This unit modifies the basic model to incorporate imperfect competition where investors are not price takers. This allows a role for market liquidity in the model.

Unit 7: Multiple firms and diversification

This unit extends the basic (single firm) model to include multiple firms and considers several implications of this for the link between disclosure and cost of capital.